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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,127	06/25/2004	Gang-Hoon Lee	HI-0204	7386
<div>-34610 7590 07/19/2007 KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200</div>			<div>EXAMINER REESE, DAVID C</div>	
			<div>ART UNIT 3677</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE 07/19/2007</div>	<div>DELIVERY MODE PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/500,127	Applicant(s) LEE ET AL.	
	Examiner David C. Reese	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-12,14-17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12,14-17 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

THIS FINAL ACTION IS RESPONSIVE TO THE AMENDMENT FILED 4/23/2007.

- Claims 3, 13, 18, and 20 are canceled.
- Claim 10 was amended.
- Claims 1-2, 4-12, 14-17, and 19 are pending.

Claim Rejections - 35 USC § 103

[1] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[2] Claims 1, 2, 4-6, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katagiri, US-5,598,607, in view of Overhues et al., US-5,112,178.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

With respect to claim 1, Katagiri teaches of a pivotal plate (42), a fixing plate (11), and a rotational shaft (14) inserted to vertical planes of the pivotal plate and fixing plate. A frictional member (15) is mounted around the periphery of the shaft (14), both ends of which have a

Art Unit: 3677

tightening plane on which an inserting hole is formed (43, 44). A tightening member (20) is inserted into the hole, thereby generating a braking force.

The difference between the claim and Katagiri is that Katagiri does not expressly disclose of a plate shaped spacer between the tightening planes. Overhues teaches an arrangement comprising having parallel tightening planes (not shown in drawings), a tightening member (5) and a plate shaped spacer (1) between the tightening planes. Overhues uses the spacer (1) to prevent loosening of the joint (column 1, lines 15, 16). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Katagiri as taught by Overhues, such that Katagiri includes a spacer plate, in order to prevent loosening of the joint.

Re: Claim 2, Katagiri discloses the frictional member (15) is formed on a center of the shaft (14).

Re: Claims 4 and 5, Katagiri discloses a washer (71) inserted between contact planes of the fixing and pivotal plates and a frictional housing (19) formed around an outer periphery of the frictional member (15).

Re: Claim 6, Katagiri discloses a fixing portion of non-circular shape formed on both ends of the shaft (at 12a).

Re: Claim 8 and 9, Katagiri discloses a washer (71) of plastic material inserted on a contact plane between the fixing and pivotal planes, and the frictional member is made of engineering plastic.

[3] Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katagiri in view of Overhues as applied to claim 1 above, and further in view of Lu, US-6,018,847.

Art Unit: 3677

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for claim 7, Katagiri in view of Overhues teach of the above claims. Katagiri in view of Overhues do not disclose of a guiding protuberance or guiding portion as claimed. Lu teaches a hinge comprising a fixing plate (50) and a pivot plate (40). A guiding protuberance (62) is formed on an outside vertical plane of the fixing plate, and a pivotal guiding portion in an arc shape (33) is formed on a vertical plane of the pivot plate. The protuberance is received in the guiding portion. This arrangement limits the range of motion of the hinge. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Katagiri and Overhues to include this arrangement to limit the range of motion of Katagiri's hinge.

[4] Claims 10-12, 14-17, and 19 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Katagiri, US-5,598,607, in view of Overhues et al., US-5,112,178, and in further view of Lu, US-6,018,847.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for independent claims 10 and 15, Katagiri discloses a pivotal plate (42), fixing plate (11), rotational shaft (14), frictional member (15), and tightening member (20) fitted into a hole (43, 44).

The difference between the claim and Katagiri is that Katagiri does not expressly disclose of a plate shaped spacer between the tightening planes and of an elastic member and the guiding protruberance and portion. With respect to the former issue above, Overhues teaches an arrangement comprising having parallel tightening planes (not shown in drawings), a tightening member (5) and a plate shaped spacer (1) between the tightening planes. Overhues uses the spacer (1) to prevent loosening of the joint (column 1, lines 15, 16). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Katagiri as taught by Overhues, such that Katagiri includes a spacer plate, in order to prevent loosening of the joint.

Further, with regard to the latter issue above, Lu teaches a hinge comprising an elastic member (70), a fixing plate (50), and a pivot plate (40). A guiding protuberance (62) is formed on an outside vertical plane of the fixing plate, and a pivotal guiding portion in an arc shape (33) is formed on a vertical plane of the pivot plate. The protuberance is received in the guiding portion. This arrangement limits the range of motion of the hinge. The elastic member biases the arrangement to a preferred position (column 2, lines 35-45). The elastic member is mounted on a cylindrical spacer (20) that is mounted around a contact plane between the elastic member and the rotational shaft. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Katagiri include this arrangement to limit the range of motion of Katagiri's hinge and bias the hinge to a preferred position.

Re: Claims 11, 12, 16, and 17, Lu further shows the elastic member (70) to be a torsion spring in a coil shape, and that one end of the member is hooked on a horizontal plane (in 52) of the fixing plate (50) and the other extended to an inside from a horizontal plane (in 37) of the pivotal plate.

Re: Claims 14 and 19, Katagiri discloses the frictional member to be of engineering plastic.

Response to Arguments

[5] Applicant's arguments filed 4/23/2007 regarding rejections under 35 U.S.C. 103 have been fully considered but they are not persuasive. In the instant case, the applicant states that claimed plate shaped spacer is different from the washer disclosed by Overhues. The only structural limitations given to the spacer was that of a "plate shaped spacer [to be inserted] between frictional member tightening planes, [for supporting force exerted on the frictional member]." Such structural limitations and force distribution properties are met by the washer disclosed by Overhues and thus the obviousness rejection is considered proper and maintained by the examiner. Further, the limitations on which the applicant relies ("keeping a predetermined gap", etc.) are not stated in the claims. It is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable. *Constant v. Advanced Micro-Devices Inc.*, 7 USPQ2d 1064. The fact that Applicant may use the plate shaped spacer for a different purpose does not alter the conclusion that its use in a prior art device would be prima facie obvious from the purpose disclosed in the reference. *In re Lintner*, 173 USPQ 560. And further, it has been held that one cannot show non-obviousness by

Art Unit: 3677

attacking references individually where, as here, the rejections are based on combinations of references. *In re Keller*, 208 USPQ 871 (CCPA 1981).

With regard to claim 7, applicant states that Lu is merely cited to teach a guiding protuberance or guiding portion. Again, it has been held that one cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references. *In re Keller*, 208 USPQ 871 (CCPA 1981). As for independent claims 10 and 15, please see the above paragraph.

Art Unit: 3677

Conclusion

[6] **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


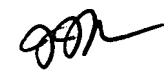
[7] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272-7082. The examiner can normally be reached on 7:30 am-6:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached at (571) 272-7075. The fax number for the organization where this application or proceeding is assigned is the following: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DCR

David Reese
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7/10/07
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